REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-16, 18, 19, 21, 22, 24, 26, 27, 29 and 31 remain pending, wherein claims 1, 3, 14, 19, 21, 22 and 27 have been amended. Support for the amendments to claim 1 can be found in the present application at least at page 8, lines 5-16, page 9, lines 20-24 and in Figure 7. Support for the amendment to claim 3 can be found in the present application at least at page 7, line 23 through page 8, line 4. Support for the amendments to claims 14 and 27 can be found in the present application at least at page 8, lines 5-16. Support for the amendment to claim 19 can be found in the present application at least at page 7, line 23 through page 8, line 4.

In paragraph 8 of the Office Action claims 21, 22, 24 and 26 are objected to for minor informalities. By this amendment these informalities have been addressed. Accordingly, withdrawal of these objections is respectfully requested.

In paragraphs 10 and 11 of the Office Action claims 1-7, 19 and 21 are rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,222,834 to *Kondo* ("*Kondo*"). This ground of rejection is respectfully traversed.

Kondo does not anticipate Applicants' claim 1 because *Kondo* does not disclose all of the elements of Applicants' claim 1. For example, *Kondo* does not disclose "a first stage, the first stage configured to use an input signal to find a set of more than N paths" and "a second stage, the second stage configured to use the first set of more than N paths, the input signal and a quality signal from the RAKE receiver to generate a set of N paths, the second stage generates the sets of N paths more frequently than the first stage generates

the set of more than N paths" wherein N corresponds to the number of fingers in a RAKE receiver.

As previously discussed, *Kondo* does not disclose a relationship between the number of fingers in the RAKE section 140 and the number of paths detected by searcher section 120 or tracked by tracking section 130. Nevertheless, in the Response to Arguments section of the Office Action, it is asserted that *Kondo's* disclosure of removing a tracking path having a correlation level equal to or lower than a given threshold from the paths to be subjected to RAKE synthesis, discussed in column 7, lines 40-48, "implies that the number of tracking paths are greater than the number of paths selected for rake synthesis." A rejection under 35 U.S.C. §102 requires that a disclosure be either expressly or inherently present in a prior art reference. As acknowledge by the Office Action, *Kondo* does not explicitly disclose a relationship between the number of fingers in the RAKE section 140 and the number of paths detected by searcher 120, or tracked by tracking section 130.

MPEP section 2112 citing In re Robertson, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999), states that "[t]o establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" Accordingly, the Office Action asserts that since some paths are removed prior to RAKE synthesis that there is an implication that the number of tracking paths are greater than the

number of paths selected for RAKE synthesis. However, *Kondo* bases the selection of paths on the correlation level output from the tracking section and on the path state. There is nothing in *Kondo* which discloses expressly or inherently that the removal of paths is performed due to a limited number of fingers for RAKE synthesis. For example, the communication receiver of *Kondo* is likely battery powered. Accordingly, *Kondo* could be removing paths below a threshold since those paths may not be reliably decoded, and hence, battery power would be wasted trying to decode those paths. Accordingly, the implication of *Kondo* asserted by the Office Action is based upon possibilities, and this implication is not necessarily present in the disclosure of *Kondo*. Since the Applicants have provided another reason why the disclosure of *Kondo* removes paths below a threshold, it is clear that the Office Action's asserted implication does not rise to the level of inherency, i.e., the relationship between the RAKE fingers and the tracked paths are not necessarily present in *Kondo*.

Additionally, the tracking section 130 of *Kondo* receives tracking paths from path capturing/holding section 150, the demodulated signal from the receiver 110, and a spread code from spread code generating section 180. However, *Kondo* does not disclose that the tracking section 130 is "configured to use the first set of more than N paths, the input signal and a quality signal from the RAKE receiver" as recited in Applicants' claim 1. Additionally, *Kondo* does not discuss that the searcher section 120 performs searches less often than the tracking section 130 tracks paths. Accordingly, *Kondo* does not disclose that "the second stage generates the set of N paths more frequently than the first stage generates the set of more than N paths" as recited in Applicants' claim 1.

Claim 2 depends from claim 1, and is, therefore, not anticipated by *Kondo* for at least those reasons stated above with respect to Applicants' claim 1.

Kondo does not anticipate Applicants' claim 3 because *Kondo* does not disclose all of the elements of Applicants' claim 3. For example, *Kondo* does not disclose a "second stage comprising 3*M correlators, wherein 3 correlators are assigned to each of the M paths." Nevertheless, the Office Action asserts that when M is considered equal to one that the "tracking section obtains the correlation level of each path, thus performing three times M correlations to obtain the correlation level of each path and generate estimates comprising M estimates to be used to find the second set of paths." However, *Kondo* does not disclose the number of correlators employed per path, whereas Applicants' claimed invention recites employing three correlators per path. Since *Kondo* does not disclose employing three correlators per path, *Kondo* does not anticipate Applicants' claim 3. Claim 4 depends from claim 3, and is, therefore, not anticipated by *Kondo* for at least those reasons stated above with regard to Applicants' claim 4. Claims 5-7 depend from Applicants' claim 1, and are, therefore, not anticipated by *Kondo* for at least those reasons stated above with regard to Applicants' claim 1.

Kondo does not anticipate Applicants' claim 19 because *Kondo* does not disclose all of the elements of Applicants' claim 19. For example, for similar reasons to those discussed above in connection with Applicants' claim 1, *Kondo* does not disclose a "selector configured to use the input signal, the set of candidate paths and a quality signal from the RAKE receiver to select a smaller set of candidate paths. Moreover, for similar reasons to those discussed above in connection with Applicants' claim 3, *Kondo* does not

disclose that "the selector comprising *k* times M correlators, wherein *k* correlators are assigned to each of the selected paths." Hence, *Kondo* does not anticipate Applicants' claim 19. Claim 21 depends from claim 19, and is, therefore, not anticipated by *Kondo* for at least those reasons stated above with regard to Applicants' claim 19.

For at least those reasons stated above it is respectfully requested that the rejection of claims 1-7, 19 and 21 as allegedly being anticipated by *Kondo* be withdrawn.

In paragraphs 12-19 of the Office Action claims 1-7, 19 and 21 are rejected under 35 U.S.C. §102(a) as allegedly being clearly anticipated by the English translation of Japanese Patent No. 10-164011 ("*Kitade*"). This ground of rejection is respectfully traversed.

Kitade does not anticipate Applicants' claim 1 because *Kitade* does not disclose all of the elements of Applicants' claim 1. For example, *Kitade* does not disclose a "second stage configured to use the first set of more than N paths, the output signal and a quality signal from the RAKE receiver to generate a set of N paths." Moreover, *Kitade* does not disclose that "the second stage generates the set of N paths more frequently than the first stage generates the set of more than N paths."

Kitade discloses an apparatus which selects the phase of a path in order of the size of the peak output of the tracking correlator. The phase is used by a spreading-code generator for demodulation in a RAKE receiver. In *Kitade* an input signal is provided to a correlator for search 100 which provides a correlation value to searching processing part 106. The input signal is also provided to correlator for trackings 102 which outputs a correlation value of the phase of each candidate's path to path selection equipment 109.

Path selection equipment 109 compares each of the correlation value peaks and selects the biggest correlation value, which is provided to searching process part 106. As discussed in paragraph 11 on page 12 of *Kitade*, the searching process part 106 controls the phase of the spreading code provided to the correlator for search 100, the correlator for trackings 102 and the correlator for modulation 104.

To reject Applicants' claim 1, the Office Action asserts that correlator for trackings 102 corresponds to the second stage recited in Applicants' claim 1. However, as illustrated in Figure 1 of *Kitade*, the inputs of the correlator for trackings 102 consists of the input signal and a spread code provided by spreading-code generator 103. Accordingly, *Kitade* does not disclose that the correlator for trackings 102 is configured to use the first set of more than N paths to generate a set of N paths. Moreover, *Kitade* does not disclose that the correlator for trackings 102 is configured to use a quality signal from the RAKE receiver in the generation of the set of N paths. Additionally, *Kitade* does not disclose that the correlator for trackings 102 generates the set of N paths more frequently than the correlator for search 100 (i.e., the element asserted by the Office Action to correspond with Applicants' first stage) generates the set of more than N paths. Since *Kitade* does not disclose all the elements of Applicants' claim 1, *Kitade* cannot anticipate Applicants' claim 1. Claims 2-7 depend from claim 1, and are, therefore, not anticipated by *Kitade* for at least those reasons stated above with regard to Applicants' claim 1.

Kitade does not anticipate Applicants' claim 19 because *Kitade* does not disclose all of the elements of Applicants' claim 19. For example, similar to the reasoning provided above in connection with claim 1, *Kitade* does not disclose a "selector configured to use the

input signal, the set of candidate paths and a quality signal from the RAKE receiver to select a smaller set of candidate paths." Accordingly, *Kitade* cannot anticipate Applicants' claim 19. Claim 21 depends from claim 19, and is, therefore, not anticipated by *Kitade* for at lest those reasons stated above with regard to Applicants' claim 19.

For at least those reasons stated above it is respectfully requested that the rejection of claims 1-7, 19 and 21 as allegedly being anticipated by *Kitade* be withdrawn.

In paragraph 21 of the Office Action claims 8 and 10 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kondo* in view of U.S. Patent No. 6,269,075 to *Tran* ("*Tran*"). This ground of rejection is respectfully traversed.

Claims 8 and 10 depend from Applicants' claim 1. As discussed above, *Kondo* does not disclose all the elements of Applicants' claim 1. It is respectfully submitted that *Kondo* does not suggest all of the elements of Applicants' claim 1. Additionally, it is respectfully submitted that *Tran* does not remedy the deficiencies of *Kondo* with respect to Applicants' claim 1. Accordingly, the combination of *Kondo* and *Tran* cannot render Applicants' claim 1 unpatentable. Hence, claims 8 and 10, which depend from claim 1, are patentably distinguishable over the combination of *Kondo* and *Tran*. For at least those reasons stated above it is respectfully requested that the rejection of claims 8 and 10 as allegedly being unpatentable over the combination of *Kondo* and *Tran* be withdrawn.

In paragraph 22 of the Office Action claim 9 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kondo* and *Tran* in view of U.S. Patent No. 5,799,256 to *Pombo et al.* ("*Pombo et al.*"). This ground of rejection is respectfully traversed.

Claim 9 depends from claim 8. As discussed above with regard to claim 8, the combination of *Kondo* and *Tran* does not render this claim unpatentable. Furthermore, it is respectfully submitted that *Pombo* does not remedy the above-identified deficiencies of the combination of *Kondo* and *Tran* with respect to Applicants' claim 8. Hence, the combination of *Kondo*, *Tran* and *Pombo* does not render Applicants' claim 9 unpatentable. Accordingly, withdrawal of this rejection is respectfully requested.

In paragraph 23 of the Office Action claims 11-13 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the combination of *Kondo* and *Pombo*. This ground of rejection is respectfully traversed.

Claims 11-13 depend from Applicants' claim 1. As discussed above *Kondo* does not disclose or suggest all of the elements of Applicants' claim 1. Additionally, it is respectfully submitted that *Pombo* does not remedy the above-identified deficiencies of *Kondo* with respect to Applicants' claim 1. Hence, the combination of *Kondo* and *Pombo* does not render Applicants' claim 1 unpatentable, and in turn claims 11-13 which depend from Applicants' claim 1. Accordingly, withdrawal of this ground of rejection is respectfully requested.

In paragraphs 24-50 claims 8-10, 13-16, 18, 22, 24, 26, 27, 29 and 31 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kitade* in view of U.S. Patent No. 6,456,827 to *Kubo et al.* ("*Kubo*"). This rejection is respectfully traversed.

Claims 8-10 and 13 depend from Applicants' claim 1. As discussed above, *Kitade* does not disclose all the elements of Applicants' claim 1. Moreover, it is respectfully submitted that *Kitade* does not suggest all of the elements Applicants' claim 1.

Additionally, it is respectfully submitted that *Kubo* does not remedy the above-identified deficiencies of *Kitade* with respect to Applicants' claim 1. Accordingly, the combination of *Kitade* and *Kubo* does not render Applicants' claim 1 unpatentable. Accordingly, the combination does not render claims 8-10 and 13, which depend from Applicants' claim 1 unpatentable.

The combination of *Kitade* and *Kubo* does not render Applicants' claim 14 unpatentable because the combination does not disclose or suggest all of the elements of Applicants' claim 14. For example, the combination of *Kitade* and *Kubo* does not disclose or suggest a "selector configured to use the input signal, the set of candidate paths and a quality signal from the RAKE receiver to select a subset of candidate paths that are used to configure the RAKE receiver" as recited in Applicants' claim 14.

To reject Applicants' claim 14 the Office Action asserts that the selector of Applicants' claim 14 is disclosed by the combination of elements 202, 210, 209 and 206 in Figure 2 of *Kitade*. However, if all of these elements are grouped together to form a selector, as asserted by the Office Action, the only inputs to this "selector" are the input signal and the output from the correlator for search 200. Hence, *Kitade* does not disclose a "selector configured to use the input signal, the set of candidate paths and a quality signal from the RAKE receiver to select a subset of candidate paths that are used to configure the RAKE receiver" as recited in Applicants' claim 14. Moreover, it is respectfully submitted that *Kubo* does not remedy the above-identified deficiencies of *Kitade*. Accordingly, the combination of *Kubo* and *Kitade* does not render Applicants' claim 14 unpatentable.

Claims 15, 16 and 18 variously depend from Applicants' claim 14, and are, therefore, patentable distinguishable over the combination of *Kitade* and *Kubo* for at least those reasons stated above with regard to Applicants' claim 14.

The combination of *Kitade* and *Kubo* does not render Applicants' claim 22 unpatentable because the combination of *Kitade* and *Kubo* does not disclose or suggest the step of "selecting a second set of paths from the first set of paths based on a second set of correlation values and a quality signal from the RAKE receiver" as recited in Applicants' claim 22.

To reject Applicants' claim 22 the Office Action asserts that searching process part 206 in Figure 2 of *Kitade* discloses the selecting step of Applicants' claim 22. However, searching process part 206 does not receive a quality signal from the RAKE receiver, and hence, cannot disclose or suggest performing the step of "selecting a second set of paths from the first set of paths based on a second set of correlation values and a quality signal from the RAKE receiver" as recited in Applicants's claim 22. Moreover, it is respectfully submitted that *Kubo* does not remedy the above-identified deficiencies of *Kitade* with respect to Applicants' claim 22. Accordingly, the combination of *Kitade* and *Kubo* cannot render Applicants' claim 22 unpatentable. Claims 24 and 26 depend from Applicants' claim 22, and are, therefore, patentably distinguishable over the combination of *Kitade* and *Kubo* for at least those reasons stated above with regard to Applicants' claim 22.

Claim 27 recites similar elements to those discussed above with regard to Applicants' claim 22. For example, claim 27 recites the step of "selecting a second set of paths from the first set of paths based on the correlation values, the input signal and a

quality signal from the RAKE receiver." Accordingly, the combination of *Kitade* and *Kubo* does not render Applicants' claim 27 unpatentable for similar reasons to those discussed above with regard to Applicants' claim 22. Claims 29 and 31 depend from claim 27, and are, therefore, patentably distinguishable over the combination of *Kitade* and *Kubo* for at least those reasons stated above with regard to Applicants' claim 27.

For at least those reasons stated above it is respectfully requested that the rejection of claims 8-10, 13-16, 18, 22, 24, 26, 27, 29 and 31 as allegedly being unpatentable over the combination of *Kitade* and *Kubo* be withdrawn.

In paragraphs 51-55 of the Office Action claims 11 and 12 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the combination of *Kitade* and U.S. Patent No. 5,987,012 to *Bruckert et al.* ("*Bruckert*"). This ground of rejection is respectfully traversed.

Claims 11 and 12 depend from Applicants' claim 1. As discussed above, *Kitade* does not disclose or suggest all of the elements of Applicants' claim 1. Moreover, it is respectfully submitted that *Bruckert* does not remedy the above-identified deficiencies of *Kitade* with respect to Applicants' claim 1. Hence, the combination of *Kitade* and *Bruckert* does not render Applicants' claim 1 unpatentable, and in turn claims 11 and 12 which depend therefrom. Accordingly, withdrawal of the rejection of claims 11 and 12 in view of the combination of *Kitade* and *Bruckert* is respectfully requested.

All outstanding objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance. Notice to this effect is

earnestly solicited. If there are any questions regarding this response, or the application in general, the Examiner is encouraged to contact the undersigned at 703-838-6578.

Respectfully submitted,

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